DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, 5th line, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-7, 10, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Getz (2,760,564) in view of Keefer (US2002/0098394). Getz discloses substantially all of the claimed limitations. For example, an atomizing Nozzle 45, the supply unit comprising a liquid fuel feed gerotor pump 63, and a vane pump 60 and a motor 40, said liquid fuel feed pump having an inlet connectable to a liquid fuel conduit from a liquid fuel source 70, such as an oil tank, and an outlet connectable to an inlet of a liquid fuel metering device 85 with a valve 66, with the compressor having an outlet being connectable to the gas atomizing nozzle of the liquid fuel burner 245. Nevertheless, Getz does not specifically recite the pump and compressor driven by a single motor positioned between them and on a common drive shaft. Keefer teaches a system including a compressor 101 and a pump 103 driven by a single motor 105 positioned therebetween (see at least fig. 4A) and with a single drive shaft. Such an arrangement has the clear benefit of providing a single drive for two devices that would otherwise require two drives, thereby reducing cost of manufacture and operation. Accordingly, it would have been obvious to one having ordinary skill in the art at the time of invention to incorporate the common drive shaft arrangement taught by Keefer into the invention disclosed by Getz, so as to reduce costs.

5. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Getz (2,760,564) in view of Keefer (US2002/0098394), and further in view of Massimo (4,994,984). The combination of Getz and Keefer teaches substantially all of the claimed limitations, but does not specifically recite the metering device being an electromagnet driven metering piston pump. Massimo teaches electromagnet driven

metering piston pump (see at least col. 8, lines 4-30). While the environment in which Massimo's metering device is different than that of the instant invention, the problem faced is the same. Primarily, the problem of effective fluid control. As such, the device taught by Massimo provides enhanced control and conveyance of the fluid that could not be attained with a valve type metering device. Accordingly, it would have been obvious to one having ordinary skill in the art at the time of invention to incorporate the metering device taught by Massimo into the invention taught by the combination, so as to provide enhanced control and conveyance.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Getz (2,760,564) in view of Keefer (US2002/0098394). The combination of Getz and Keefer teaches substantially all of the claimed limitations, but does not specifically recite the claimed heat output of the burner. The claimed capacity is an obvious modification based on design choice, and depends on intended use. It is not unobvious to make a device greater or smaller to increase or decrease its output, particularly within the claimed 10kW. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate it into the invention disclosed by the combination, so as to provide for intended use.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Basichas whose telephone number is 571 272

4871. The examiner can normally be reached on Monday through Friday during regular business hours.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center telephone number is 571 272 3700.

June 18, 2008

/Alfred Basichas/
Primary Examiner, Art Unit 3749